

REMARKS/ARGUMENTS

Favorable reconsideration of this application as currently amended and in view of the following remarks is respectfully requested.

Claims 1-7 are currently active in this case. Claim 1 has been amended by the present amendment.

In the outstanding Office Action, Claims 1-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over “Applicant’s admission of prior art (AAPA)” in view of U.S. Patent 5,859,677 to Watanabe et al.; and Claims 6 and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over “AAPA” in view of Watanabe et al. and U.S. patent 6,788,356 to Song.

Briefly recapitulating, the present invention is directed to a liquid crystal display including a plurality of pixel areas. Each pixel area includes a pixel electrode formed over a pixel area; a switching element formed on a first gate line; and a first shielding layer directly connected to the first gate line. The electrical connection between the shielding layer and the gate line provides an increased aperture ratio of the TFT-LCD device, a reduced coupling effect between a data line and a pixel electrode, a complimentary storage capacitor, and an operative path for repairing an open gate line. See the specification at page 3, lines 28-33. Further, because the switching element is formed on the first gate line, the pixel area has a larger transparent area. See Figures 3C, 3D, and 3E. Moreover, see the specification at page 6, lines 11-15.

The Official Action asserts in the second paragraph on page 4 that in view of the teachings of Watanabe it would have been obvious to have a light shielding layer electrically connected to the first gate line because one would be motivated to provide potential stability which serves to suppress liquid crystal disclination that becomes a cause for course image appearance and residual image. Applicants respectfully traverse this assertion. Applicants

also point out that claim 1 has been amended to clarify that the first shielding layer is directly connected to the first shielding layer.

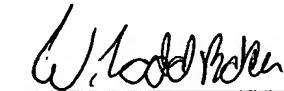
Applicants submit that Watanabe does not teach or suggest an LCD having a light shielding layer that is directly connected to the gate line. Rather, Watanabe et al. merely teach a gate electrode 111 electrically connected to pixel electrode 5. The pixel electrode 5 and the light shielding layer 116 sandwich insulator layers 114 and 115 forming a capacitor. Because the capacitor is formed between the pixel electrode 5 and the light shielding layer 116, the gate electrode 111 is not electrically connected to the light shielding layer 116. Moreover, the gate electrode 116 is not directly connected to the light shielding layer. See Figures 11 and 17 of Watanabe.

For the foregoing reasons, the AAPA in view of Watanabe et al. is not believed to render obvious the subject matter defined by Claims 1-7.

Consequently, in view of the above remarks, no further issues are believed to be outstanding in the present application. An early and favorable action is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599

W. Todd Baker
Registration No. 45,265

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)